

Key Differences in Tersoff Variants:

	Tersoff 1989 [8]		Tersoff 1990 [11]		Tersoff 1994 [12]	
	C	Si	C	Si	C	Si
$A$ (eV)	1393.8	1830.8	1544.8	1830.8	1544.8	1830.8
$B$ (eV)	346.70	471.18	389.63	471.18	389.63	471.18
$\lambda$ ( $\text{\AA}^{-1}$ )	3.4879	2.4799	3.4653	2.4799	3.4653	2.4799
$\mu$ ( $\text{\AA}^{-1}$ )	2.2119	1.7322	2.3064	1.7322	2.3064	1.7322
$\beta$ ( $\times 10^{-6}$ )	0.15724	1.1000	4.1612	1.1000	4.1612	1.1000
$n$	0.72751	0.78734	0.99054	0.78734	0.99054	0.78734
$c$	38049	100390	19981	100390	19981	100390
$d$	4.3840	16.217	7.0340	16.217	7.0340	16.217
$h$	-0.57058	-0.59825	-0.33953	-0.59825	-0.33953	-0.59825
$R$ ( $\text{\AA}$ )	1.8	2.7	2.5	2.5	1.8	2.7
$S$ ( $\text{\AA}$ )	2.1	3.0	2.5	2.5	2.1	3.0
$\chi_{\text{C-Si}}$	0.9776		0.9972		1.0086	

Year	Si/C CN	Si-Si/Si-all	C-C/C-all	$\chi$ [=C-C/C-Si]	$\Delta H$ (eV/bond)	Notes
1989	5.0/3.7	0.54	0.37	0.59	-0.09	$\pi$ -bonding C
1990	3.9/4.0	0.23	0.24	0.32	-0.43	Poor PDF
1994	4.8/4.0	0.47	0.36 (0.33)	0.56 (0.50)	-0.12 (-0.18)	$\alpha$ -SiC